

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
16 December 2004 (16.12.2004)

PCT

(10) International Publication Number  
**WO 2004/109061 A1**

(51) International Patent Classification<sup>7</sup>: **F01D 11/00**

(21) International Application Number:  
**PCT/EP2004/006005**

(22) International Filing Date: 3 June 2004 (03.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
103 25 292.4 4 June 2003 (04.06.2003) DE

(71) Applicant (for all designated States except US): UMI-CORE AG & CO. KG [DE/DE]; Rodenbacher Chaussee 4, 63457 Hanau-Wolfgang (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): GIESHOFF, Jürgen [DE/DE]; Am Burgwerksrain 10, 63599 Biebergemünd (DE). FINKBEINER, Hartmut [DE/DE]; Berger Weg 3, 72270 Baiersbronn (DE). LOX, Egbert [BE/DE]; Am Lärchentor 8, 36355 Hochwaldhausen (DE). KREUZER, Thomas [DE/DE]; Philipp-Reis-Strasse 13, 61184 Karben (DE).

(74) Agent: VOSSIUS & PARTNER; Siebertstrasse 4, 81675 Munich (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

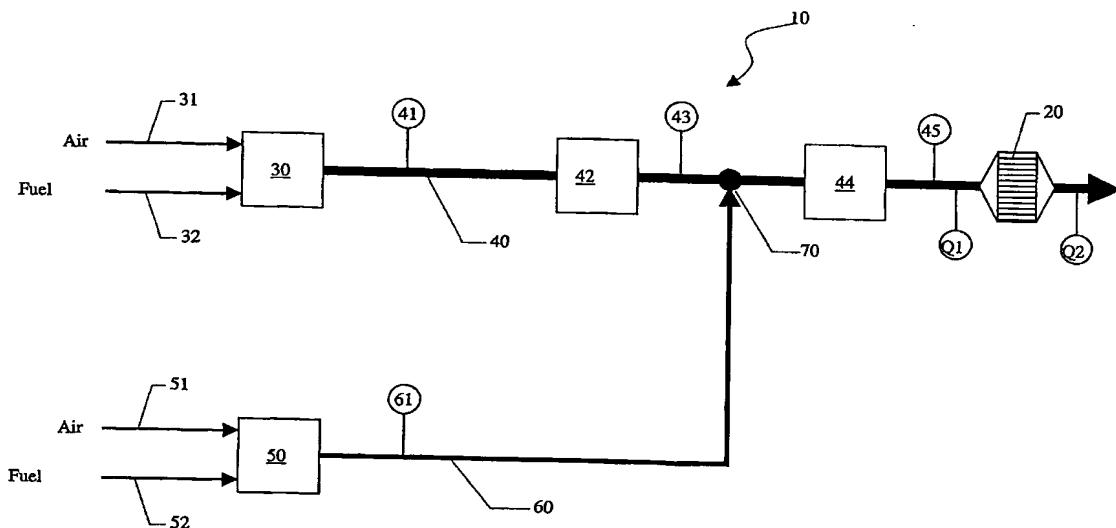
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR DETERMINING THE ACTIVITY AND AGING BEHAVIOR OF A CATALYST



(57) Abstract: The invention relates to a method of determining activity and aging behavior of a catalyst. For this purpose, two independent substreams of combustion offgases are produced and mixed before coming into contact with the catalyst. The first substream of combustion offgases is preferably produced by burning a motor fuel and forms the major part of the combustion offgases. The second substream of combustion offgases is produced by means of a gas burner whose air ratio can be adjusted within a wide range. Mixing of this second substream of combustion offgases into the first substream enables the composition of the total stream to be set in a defined manner.

**WO 2004/109061 A1**



*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*